Final Report
Solid Waste Law Advisory Group
December 18, 2003

This report summarizes the work of approximately thirty stakeholders, representing solid waste industry, solid waste management districts, cities, counties, recycling businesses and non-profit groups. The primary objective is to put on paper the group's output from meetings held September 23-24 and October 8, 2003. A draft report of the September 23-24 meeting was sent to stakeholders on September 30 and a draft report of the October 8 meeting was sent November 4, 2003. The Department of Natural Resources received no comments to either draft report.

I. September 23-24, 2003 Meeting

Dr. Jerry Wade facilitated the meeting with the assistance of Alice Geller (DNR).

Matrix of Solid Waste Activities
Advisory group members were provided with an "actions" matrix prior to the meeting. The matrix was created from two main components:

1. A list of actions based on the work of five stakeholder groups for input to a statewide solid waste management plan. The five groups looked at several categories of solid waste: residential, institutional, commercial, industrial, and construction/demolition. They identified actions which they thought would be needed to meet the goals and objectives of a solid waste plan.

2. A list of actions not identified by the state plan stakeholders, but currently being conducted to carry out the duties and responsibilities in the Missouri Solid Waste Law.

The actions were placed into four main categories for the state plan, reflected in the matrix: Education for All, Waste as a Resource, Safe Disposal practices and Special Waste Issues.

Participants were organized into nine groups. Each group was asked to indicate for each action whether they viewed it as essential, important, or not necessary. These choices were tallied and a revised version of the matrix created (see enclosed). The revised version is sorted by the "Essential" and "Important" columns. This process helped to evaluate the activities as a framework for discussing the funding issue.

General Tonnage Fee Discussion
After the ranking activity workgroup members were polled to judge their overall support for increasing the tonnage fee, keeping it the same, or decreasing the fee. For each proposal, stakeholders were to indicate if they support (thumb up), could live with (thumb horizontal) or opposed (thumb down). The poll indicated that it was nearly equal for those who support or could live with a fee increase as opposed to keeping the fee the same. This seemed to indicate that there would be no consensus on changing the tipping fee.

	Thumbs Up (in favor of)	Thumbs horizontal (can live with it)	Thumbs Down (against)
Increase the tonnage fee	**8**	**9**	**11**
Decrease the tonnage fee	**1**	**2**	**24**
Keep the tonnage fee "as is"	**13**	**9**	**4**

Stakeholders also provided pro and con statements to explain their vote.

	PRO	CON
Increase the tonnage fee	• May be able to fund the budget deficit • More money available to districts • More revenue (2) • Continue funding • Make alternatives (to disposal) more viable • Minimum impact on customer base if modest increase	• Increased direct exports (2) • Increased consumer costs (3) • Increased illegal dumping (3) • Practicality of doing (2) • Must open law (3): funds could be diverted to others; budget battle likely • Look at other revenue sources, including GR (general revenue)
Decrease the tonnage fee	• Decrease illegal dumping • Decrease customer costs • More waste kept in state, therefore increase in revenue • Not an option (given twice) • Lower cost to hauler, not to consumer (given twice)	• Less money for solid waste management plan implementation (4) • Doesn't solve problem • Strain Missouri landfills (2) • Fee accepted – no issue
Keep the tonnage fee "as is"	• Will not need to open law • Wouldn't need to be here • Baseline proved • Economic stability	• Cuts continue • $1.3 million shortfall (2) • Reduce ability to cover costs (2) • Doesn't solve problem

Principles for Distribution of the Solid Waste Fund

The stakeholders were asked to come up with the principles they would use to direct their decision regarding the distribution of the fund. After some discussion, the following key principles were given.

- Ensure adequate funding to ensure primacy
- Fund essential services but evaluate what they are
- Keep in place core DNR programming
- Are there duplication of efforts? Is the function required? or done elsewhere?
- Distribution between districts equitable

- More decentralization of evaluation and funding of target grant projects
- Determine the most effective means to achieve programming goals and objectives
- Are grant programs necessary?
- State Vs Local: essential services; equity in distribution
- Districts accomplish essential tasks
- Increase legislative understanding of DNR & solid waste needs, programs statewide

II. October 8, 2003 Meeting

On October 8, 2003, stakeholders met to continue discussions regarding statewide solid waste activities in Missouri, funding needs and funding options. Dr. Jerry Wade facilitated the meeting with the assistance of Alice Geller (DNR). After brief opening remarks by Roger Randolph, Director of the Solid Waste Management Program, Dr. Wade reviewed the meeting agenda and went over the rules of engagement for the meeting.

Agenda

I. Opening (Roger Randolph) - synopsis of last meeting

II. Information on Solid Waste Programming
   A. DNR's broad budget situation presentation (Gary Heimericks)
   B. Overall progress made in solid waste management since Senate Bill 530 (Dennis Hansen)
   C. EIERA's Market Development Program (Kristin Allan)
   D. DNR project grants (Stan Putter)
   E. Solid Waste Management Districts (Lynda Roehl)

III. Basic Solid Waste Management Programming for the State – What & Who

IV. Funding Recommendations

The meeting proceeded with Item II. on the agenda; *Information on Solid Waste Programming.* Individuals identified in the agenda made presentations. Copies of the presentation materials are attached and are referenced by the agenda item heading.

After the presentations and lunch, the meeting proceeded with Item III. on the agenda; *Basic Solid Waste Planning of Programming of the State – What & Who.* To begin, Dr. Wade reviewed with the stakeholders basic assumptions (below) that developed from the September 23-24 stakeholder meeting. Dr. Wade described how these assumptions were derived and how they worked within the framework of the work group tasks.

Basic Assumptions

1. State's Solid Waste Efforts will be totally fee based
2. Total solid waste management efforts
3. Plan driven – from the bottom up
4. Honest and Transparent

After Dr. Wade's discussion, a matrix of solid waste management activities was handed out.

Matrix of Solid Waste Management Activities

The matrix of solid waste management activities which stakeholders evaluated during the September 23-24 meeting was handed out. The stakeholders indicated during the September meeting whether they viewed each action as "Essential," "Important," or "Not Necessary." The choices made by each of the nine tables of stakeholders were tallied and are found in the corresponding column of the revised matrix (see attached). Department staff looked at the tallies to help select activities which make up core solid waste functions.

The first step was to select all Actions which half or more of the tables gave a rating of "Essential." This means that Actions with a tally of 4.5 or greater in the **Essential** column are labeled as "Essential" in the **Rating** column.

Next, the Actions were selected which half or more of the tables gave a rating of "Not Necessary." So all Actions with a tally of 4.5 or greater in the **Not Necessary** column are labeled as "Not Necessary" in the **Rating** column.

The actions which remain would be "Important" – but this included such a great number of the actions that staff devised a way to represent the degree of importance. Some of these Actions were rated as "Essential" by one or more of the tables. Since a rating of "Essential" was the highest rating possible, two points were assigned to each tally in the **Essential** column. By adding this score to the tally in the **Important** column, staff were able to show the degree of importance for each action. For example, an Action with a tally of two in the **Essential** column and three in the **Important** column would have a total calculated value of seven ((2x2)+3). An Action with a tally of five in the **Important** column and none in the **Essential** column would have a total calculated value of five. This allows the "Essential" rating given by participants to weight the "Important" rating where applicable.

The result of assigning two points to each tally in the **Essential** column and adding it to the tally in the **Important** column is shown in the **Calculated Value** column. Actions with a calculated value of 4.5 – 6.5 were then labeled as "Important" in the **Rating** column; actions with a calculated value of 7 or greater were labeled "Critically Important" in the **Rating** column.

After a discussion about the matrix the SWMP provided the work group with a cost estimate for the department to conduct the essential and critically important activities identified in the matrix (see attached). The SWMP indicated that along with SWMP central office activities including the waste tires unit, cost estimates included work being conducted by the department's regional offices, Geological Survey Resource Assessment Division (GSRAD), the Environmental Services Program (ESP) and the Outreach and Assistance Office (OAC). The group decided that it did not want the "Waste Tires" to be considered in the total cost estimate. Removing "Waste Tires" activities reduced the cost estimates to approximately $4.4 million.

The group also discussed its concern regarding what were considered core functions. The discussion lead into what activities should be considered that could only be effectively done by the DNR. These activities were those falling under the "Safe Disposal Practices" item. These

activities are typically conducted by the enforcement and engineering sections of the SWMP, the ESP, the department's regional offices, environmental investigators, GSRAD and the Attorney General's Office. The SWMP's Planning and Financial Assistance Section is largely responsible for all remaining activities identified in the matrix. The group thought it important to examine the remaining solid waste activities to determine where these activities could be done most effectively.

The meeting moved into Item IV on the agenda; "*Funding Recommendations.*" The workgroup members were polled to judge their overall support for DNR funding, stakeholders were to indicate if they support (thumb up), could live with (thumb horizontal) or opposed (thumb down). The following chart shows the resulting output of the poll and workgroup suggestions regarding the issue.

Current DNR Funding

1. A strong likelihood that the law will be opened up during the coming legislative session.

The group agreed that this was a true statement. However, the group did not make a ecommendation to open the legislation. There were mixed sentiments on that. However,the group felt it needed to be prepared for the inevitable.

2.

CHART I			
👍	Thumbs Up (in favor of)	14	Approximately $4.4 million to support solid waste core functions with an examination of who does what – i.e. where functions can be best done. ("Essential" & "Critically Important" = Core Functions)
🤜	Thumbs horizontal (can live with it)	2	
👎	Thumbs Down (against)	6	

a.

👍	Thumbs Up (in favor of)	10	$1.2 million Solid Waste functions
🤜	Thumbs horizontal (can live with it)	9	
👎	Thumbs Down (against)	2	

b.

👍	Thumbs Up (in favor of)	20	$3.2 million towards solid waste permit & enforcement (review effective/efficient)
🤜	Thumbs horizontal (can live with it)	1	
👎	Thumbs Down (against)	0	

Discussion:
1. Suggest breaking out the solid waste functions to show regulatory efforts clearly
2. Suggest – this is a redistribution rather than a reduction.

The following provides additional information and discussion regarding the items referenced under "*Current DNR Funding*" in **CHART I.**

2.a. *The $1.2 million would provide sufficient funding to "core functions of solid waste reduction and diversion activities currently being done by the department." The group did not agree on what activities could or should be done by the department or if they should be done by other entities such as the districts.*

2.b. *The $3.2 million would provide sufficient funding to fully support solid waste permitting and enforcement activities. A review should be conducted to ensure activities are performed as efficiently and effectively as possible. There was strong support by the group for this item.*

Obtaining Input from Each Table Group

The work group then discussed funding scenarios for the Environmental Improvement and Energy Resources Authority (EIERA). The work group divided into five table groups. Each table discussed possible funding scenarios. Three of the tables provided ideas and discussion points about distributing the funds. Two tables provided discussion points but did not offer a funding distribution scenario, nor did they offer support for the current fund distribution. The following chart and discussion points are the output from the activity.

CHART II

	Current Distribution	Ideas for new distribution of approximately $11,000,000 annually from each		
EIERA	Up to 10%	$500,000 Does <u>not</u> provide HHW funding	Up to 10%	Share $1.3 million
DNR	Up to 25% of remaining monies after EIERA portion removed	$4 to 4.5 million Does provide HHW funding ($150,000)	$4.4 million Look at who does what	$4.4 million
Solid Waste Manage-ment Districts	At least 50% of remaining monies after EIERA portion removed	At least 50% of fund after EIERA portion removed	At least 50% of remaining monies after EIERA portion removed $5.2 million (53-55%)	$5.4 million (51-52%) Provides $400,000 for SWMD admin
State Project Grants	All remaining monies (usually up to 25%)	$500,000-700,000	Provides $400,000 for SWMD admin	Share $1.3 million Does <u>not</u> provide $400,000 for SWMD admin

Discussion Points

1. Need more discussion of what EIERA and Districts are and should be doing
2. More work on how to do
3. Project grants diverted to DNR and Districts
4. We must have a plan.
5. $4.4 million DNR activities are critical. (Some items could/should be done by districts)

The workgroup members were polled using the thumb-point process to judge their overall support for each proposal. The following chart shows the resulting output of the poll for EIERA funding.

EIERA

CHART III			
	Thumbs Up (in favor of)	6	$500,000 without HHW funds
	Thumbs horizontal (can live with it)	2	
	Thumbs Down (against)	9	

	Thumbs Up (in favor of)	7	$1,000,000 with HHW funds
	Thumbs horizontal (can live with it)	5	
	Thumbs Down (against)	6	

	Thumbs Up (in favor of)	1	$650,000 without HHW funds
	Thumbs horizontal (can live with it)	13	
	Thumbs Down (against)	3	

HHW funding = $150,000

The workgroup then deliberated on the percentage of funding for the Solid Waste Management Districts (SWMD). The workgroup members were polled using the thumb-point process to judge their overall support for two proposals. The following chart shows the resulting output of the poll.

SWM DISTRICTS

CHART IV			
👍	Thumbs Up (in favor of)	12	Not less than 55% (includes District Admin $400,000)
🤜	Thumbs horizontal (can live with it)	3	
👎	Thumbs Down (against)	3	

👍	Thumbs Up (in favor of)	9	Not less than 50% plus additional $400,000 for District Admin
🤜	Thumbs horizontal (can live with it)	10	
👎	Thumbs Down (against)	2	

Balance after any distribution goes to Project Grants

A discussion item was brought up by a SWMD representative to keep the $400,000 district administration grant within the project grant distribution so as not to draw attention to the additional funding the districts received for administration.

A fund distribution model was shown for each of the scenarios (attached). These scenarios include the breakout distribution shown in items 2.a. and 2.b. of **CHART I**.

Discussions continued regarding fee distribution. The last activity of the workgroup culminated with the following concepts having been discussed:

1. The EIERA to receive $650,000 of tonnage fee revenues. The $150,000 amount for Household Hazardous Waste would not come from the EIERA allocation but from the DNR portion.

2. Of the remaining revenues, an amount of approximately $4.4 million dollars would be allocated to support solid waste core functions. While the group viewed permitting and enforcement as department activities, they felt that certain core solid waste functions would need to be examined to determine who best should carry them out. Household hazardous waste will also be paid out of this portion.

3. Not less than 50 percent of the tonnage fee revenues of the remaining revenues would be allocated to the districts for grants. An additional $400,000 would be allocated to the amount for district operational grants.

4. Remaining revenues would be available for state project grants.

This report was provided to Steve Mahfood, Director of DNR, for his review and consideration in development of draft legislation regarding the solid waste management fund.

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OCTOBER 8, 2003

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10/08/03

MATRIX OF SOLID WASTE MANAGEMENT ACTIVITIES

Key for Organizational Responsibility:
1 = This work is currently being done by the responsible party
1* = This work is currently being done by the responsible party, but more effort could be put into this issue.
2 = Identified by the Stakeholders, but is not being done by the responsible party
3 = Not identified by the Stakeholders, but this work is currently being conducted.

Key for Evaluation:	
Rating Column - Each action is given a rating based on the input provided by stakeholders Sept. 23-24. Stakeholders were divided into 9 groups, giving each category a possible tally of 0-9	**How Rating was assigned:**
	Essential = A tally of 4.5 or greater in the "Essential" column
	Important = A "Calculated Value" of 4.5 – 6.5
	Critically Important = A "Calculated Value" of 7 or greater
	Not Necessary = A tally of 4.5 or greater in the "Not Necessary" column
Essential Column = Total points given by stakeholder group on Sept. 23-24	
Important Column = Total points given by stakeholder group on Sept. 23-24	
Calculated Value Column = 2 points for each "Essential" tally plus the tally for "Important"	
Not Necessary Column = Total points given by stakeholder group on Sept. 23-24	

Stakeholder Recommendations & Department Activities ↓	**Organizational Responsibility**						**Evaluation**				
	SWMP Enforcement & Regional Office Solid Waste Staff	SWMP Engineering	SWMP Planning & Financial Assistance	EIERA Market Development Program	DNR Outreach & Assistance Center	Other DNR	Rating	Essential	Important	Calculated Value	Not Necessary
EDUCATION FOR ALL											
Schools:											
Conduct Solid Waste Management workshops for In-Service teachers			3		3		Critically Important	3	5	11	1
Integrate solid waste environmental education into all classrooms (Pre-K - 12, MAP)			1*		1		Critically Important	2	6	10	1
Develop uniform solid waste environmental education standards and programs			1*		2		Not Necessary	1	2	4	6
Offer solid waste management courses in adult education			2		2		Not Necessary	0	3	3	6
Develop & distribute traveling recycling bins to provide hands-on materials for student learning.			3		3		Not Necessary	0	3	3	6
Set up state agency committee to reach schools			1*				Not Necessary	0	1	1	8
Require one solid waste environmental education course in post-secondary education			2		2		Not Necessary	0	0	0	9

Stakeholder Recommendations & Department Activities ↓	Organizational Responsibility						Evaluation				
	SWMP Enforcement & Regional Office Solid Waste Staff	SWMP Engineering	SWMP Planning & Financial Assistance	EIERA Market Development Program	DNR Outreach & Assistance Center	Other DNR	Rating	Essential	Important	Calculated Value	Not Necessary
EDUCATION FOR ALL (continued)											
Public/Business/Other:											
Maintain lists of recycling center locations and waste destinations	1	1	1	1*		1	Essential	6	3	15	0
Use public ad campaign to promote 3 R's			2				Critically Important	2	6	10	1
Increase local awareness of availability recovery sites			1*	1*			Critically Important	3	4	10	1
Educate purchasers and vendors about the cost/benefits of recycled content products			3	3			Critically Important	1	7	9	1
Provide information on Missouri's annual waste diversion progress			3				Critically Important	1	6.5	8.5	1.5
Provide information on how to reach targeted waste reduction goals	1	1	1	1	1		Critically Important	1	6	8	2
Train community leaders to educate others on the 3 R's	1*		1*		1		Critically Important	0	8	8	1
Produce and distribute directory of recycled-content products				3			Critically Important	1	5	7	3
Create a mechanism for sharing best practices	1*	1*	1*	1			Critically Important	2	3	7	4
Provide information on Missouri's annual recycled newsprint usage			3				Important	1	4.5	6.5	3.5
Consumer education to demand less packaging			1*		1		Not Necessary	1	2.5	4.5	6.5
Distribute results of Missouri Public Opinion Survey on Solid Waste			3				Not Necessary	0	3.5	3.5	4.5
Set up state agency committee to reach businesses and manufactures			1*	1*			Not Necessary	0	2	2	7
Sponsor state CEO summit to educate business leaders			2				Not Necessary	0	2	2	7
MANAGING WASTE AS A RESOURCE											
For All Solid Waste Streams											
Incentives:											
Streamline the process for allowing Bioreactor Landfills and Methane recovery for energy		1*					Critically Important	1	7	9	1
Tax incentives for co-collection, renewable energy, recycling, research & development			1*				Critically Important	3.5	1.5	8.5	4
Huge recognition programs for waste reduction			1*	1*	1		Critically Important	1	5	7	4
DNR & DED form task force to identify incentives to support economic growth and sound waste management practices			1*	1			Important	1	3	5	4
Research bottle deposits for legislative proposals			1				Not Necessary	0	1	1	8

Stakeholder Recommendations & Department Activities ↓	Organizational Responsibility						Evaluation				
	SWMP Enforcement & Regional Office Solid Waste Staff	SWMP Engineering	SWMP Planning & Financial Assistance	EIERA Market Development Program	DNR Outreach & Assistance Center	Other DNR	Rating	Essential	Important	Calculated Value	Not Necessary
MANAGING WASTE AS A RESOURCE - All Solid Waste Streams (continued)											
Financial Assistance:											
Financial assistance for start-ups (recycling) or venture businesses			1	1			Critically Important	3	6	12	0
Use federal funds for grants for solid waste research and development	1	1	2	1			Critically Important	0	8	8	1
Use state funds for grants for solid waste research and development			1	1			Critically Important	0	7	7	2
Commercially viable recycling industry through venture capital from government (& communities & industry)			1*	1*			Important	1	3	5	2
Funding for all solid waste programs and activities	2	2	2	2	2		Not Necessary	2	2	6	5
Technical Assistance:											
Promote local government supported waste reduction programs			1*	1*			Critically Important	2	7	11	1
Promote model programs and best practices for reducing waste, recycling and composting	1*	1*	1*	1*			Critically Important	0	7	7	1
Model contracts for solid waste services that provide $ incentives for waste reduction & recycling			1*				Important	0	5	5	4
Promote and increase the use of waste for energy	1	1*	1*	1*	1		Important	0	5	5	3
Through coordination between the department, business, industry & solid waste organizations, create a database & clearinghouse of information & resources for commercial & residential solid waste management	1*	1*	1*	1*			Important	0	4.5	4.5	3.5
Create solid waste management cross-department databases			2	1			Not Necessary	2	1	5	4.5
Promote mutual goals, objectives and programs to achieve an adaptive reuse market/economy	1*		1*	1*			Not Necessary	1	2	4	6
Standardize collection services (Environmentally sound and full service for everyone)	2		2				Not Necessary	0	3	3	5
Public/private partnerships to provide technical support and fund stakeholder training	1*	1*	1*	1*			Not Necessary	0	3	3	6
Require municipalities to develop a SWM plan			1				Not Necessary	0	3	3	5
For Residential Waste											
Incentives:											
Local government provide incentives to create material recovery facilities (state/local issue)			1				Important	0	5	5	4
Financial Assistance:											
Financial assistance for communities and private haulers for volume-based collection programs (Pay-as-You-Throw) or co-collection			1				Not Necessary	0	3	3	5

Stakeholder Recommendations & Department Activities ↓	Organizational Responsibility						Evaluation				
	SWMP Enforcement & Regional Office Solid Waste Staff	SWMP Engineering	SWMP Planning & Financial Assistance	EIERA Market Development Program	DNR Outreach & Assistance Center	Other DNR	Rating	Essential	Important	Calculated Value	Not Necessary
MANAGING WASTE AS A RESOURCE – Residential Waste (continued)											
Technical Assistance:											
Provide guidance and training for Pay-As-You-Throw programs and full cost accounting			1*				Critically Important	0	7.5	7.5	1.5
Help improve collection efficiency to minimize recycling costs			1*				Important	0	6	6	2
Partnerships:											
Create partnership between Education – Social Services – Recycling communities	1*		1*				Not Necessary	0	2	2	5.5
For Institutional Waste											
Use waste audits to evaluate current programs and find opportunities to increase diversion			1*	1*			Critically Important	2	6	10	0
Promote and increase the use of waste exchange and reuse programs			1*	1*			Critically Important	1	7.5	9.5	1.5
Provide technical support to increase recycling and reduce waste in state government			3	3	3		Critically Important	3	2	8	3
State develops model procurement policies & contracts for institutions to support closed loop markets			1*	1*			Critically Important	0	7	7	2
DNR is responsible for developing recycling programs for all state offices			1*	1*			Not Necessary	3	1	7	5
Form public/private partnerships to provide technical support and fund stakeholder training	1*	1*	1*	1*			Not Necessary	1	2	4	6
For Commercial and Industrial Waste											
Incentives:											
Streamline regulations/permits to make it easier to use by-products as resources (e.g. cement kilns)	1*					1*	Critically Important	3	4	10	2
Create tax incentives for business and industry to use recyclables			1*	1*			Critically Important	2.5	3.5	8.5	3
Rewards and recognition to foster cooperation between industry and government			2		1		Critically Important	0	7	7	2
Economic development dollars tied to resource management			1*	1*			Important	0	5	5	3
Create a state in-kind gift receipt to qualify for tax deductible charitable contribution when materials are given to reuse programs							Not Necessary	1	0	2	8
Financial Assistance:											
Develop financial incentives for closed-loop markets			2	1*			Important	0	5	5	4
Financial assistance for business subsidies to encourage use of recycling markets (crop subsidies model)			2				Not Necessary	0	3	3	6
Technical Assistance:											
Promote the use of waste audits to evaluate solid waste systems and determine opportunities to increase diversion			1	1*	1		Critically Important	1	8	10	0

Stakeholder Recommendations & Department Activities ↓	Organizational Responsibility						Evaluation				
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MANAGING WASTE AS A RESOURCE – Commercial and Industrial Waste, Technical Assistance (continued)											
Increase the use of industrial waste exchanges			1*	1*			Critically Important	1	7	9	1
Promote the development of eco-industrial parks which enable industry to take advantage of waste and product streams and reduce hauling costs			2	2	2		Critically Important	0	7	7	2
Provide environmentally sound business planning assistance			1*	1*			Critically Important	0	7	7	2
Work with manufacturing to create "less wasteful" packaging			2	1*			Critically Important	1	5	7	3
Increase business/industry donations of by-products to teacher reuse/recycle centers			1*				Not Necessary	0	4	4	5
Create a government facilitation unit which initiates outreach to industry and responds to industry request for assistance			1*	1	1		Not Necessary	0	2	2	7
Deposits on packaging for return system			2				Not Necessary	0	1	1	8
Partnerships:											
Use industry representatives to promote recycling and source separation techniques	2		2		2		Critically Important	2	6	10	1
Partner with industry to promote recyclable and reusable products			1*	1*	1		Critically Important	1	7	9	1
Partner with industry to establish new packaging alternatives			2	1*			Critically Important	1	6	8	2
Obtain statewide industry commitment to product life cycle initiatives			2	2	2		Important	0	6	6	3
For Construction & Demolition Waste											
Incentives:											
Create financial/other incentives for building deconstruction and bulk material recycling		1	1*	1*			Critically Important	1	5	7	4
Promote the financial and other incentives for historic preservation			2		1		Important	0	5	5	4
Recognition/awards for historic preservation			2		1		Important	0	5	5	4
Create financial/other incentives to design and construct buildings according to LEED standards			2			2	Important	0	4.5	4.5	3.5
Local government provide incentives to source separate on construction and demolition site or at landfill	1*		1*				Not Necessary	0	3	3	6
Local govs create new tax incentives for C&D waste removal and reuse that is environmentally friendly							Not Necessary	0	2	2	7
Technical assistance:											
Promote and increase construction material waste exchange and reuse programs			1*	1*			Critically Important	2	6	10	1

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MANAGING WASTE AS A RESOURCE – Construction & Demolition Waste, Technical Assistance (continued)											
Develop inexpensive alternative building materials with aesthetic performance equal to traditional building materials	1*	1*	1*	1*			Critically Important	0	7	7	2
Information summary for all building construction to highlight available incentives on environmental building technologies/efficiency							Important	0	5	5	4
Feasibility/economic impact study for C&D projects	1*			1*			Not Necessary	0	4	4	5
Recycling Market Development											
End-use market development & feasibility analysis			1	1			Critically Important	2	7	11	0
Promote creation of more recycled products, including analysis of produce feasibility			1*	1			Critically Important	2	6	10	1
Promote the creation of jobs through the use of recovered materials in manufacturing				3			Critically Important	2	6	10	0
Promote the purchasing of recycled-content products by individuals, businesses, institutions and government offices	1*	1*	1*	1*			Critically Important	2	6	10	1
Assist manufacturers with locating sources of recycled-content feedstock				3			Critically Important	1	7	9	1
Help manufacturers of recycled products adopt technologies, change processes or select equipment to help increase efficiency, productivity and profitability			1	1			Critically Important	1	6	8	2
Conduct periodic review of recyclable material(s) marketability			1*	1*			Critically Important	0	7	7	2
Provide business planning assistance to recycling-related businesses				3			Important	1	4	6	4
Create financial and other incentives for market development and publicity	1*		1*	1			Important	0	6	6	3
Financial assistance to support struggling end markets with potential, for new market research and development, for advertising recycling products, and for business subsidies to encourage use of recycling markets	1		1*	1			Not Necessary	1	3	5	5
Provide marketing assistance to recycling-related businesses, including web development and training				3			Not Necessary	1	3	5	5
SAFE DISPOSAL PRACTICES											
Permitted Facilities											
Issue permits for sanitary, demolition, special waste, and utility waste landfills; ensure compliance with federal and state requirements designed to ensure that the location, design, construction & operation of solid waste facilities is protective of the environment & public health	3	3					Essential	9	0	18	0

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SAFE DISPOSAL PRACTICES - Permitted Facilities (continued)											
Issue permits for transfer stations, infectious waste facilities, material recovery facilities, co-composting facilities and solid waste incinerators; insure compliance with federal and state requirements designed to insure that the location, design, construction & operation of solid waste facilities is protective of the environment & public health		3					Essential	9	0	18	0
Conduct video surveillance of illegal dumps in order to identify violators and collect evidence of illegal dumping	3						Essential	5	3	13	0
Investigate and conduct enforcement actions against permitted solid waste facilities that fail to comply with state law and regulations	3						Essential	9	0	18	0
Provide opportunities for public involvement in the permitting process through coordination of public hearings and public awareness sessions		3					Essential	8	1	17	0
Allow location, design and operational flexibility in solid waste facilities through the approval of special permit conditions or modifications to existing facilities.		3					Essential	7	2	16	0
Review a solid waste facility applicant's history of violations to determine if the misconducts are within the limits of the Missouri Solid Waste Management Law.		3					Essential	7	2	16	0
Ensure that the permit applicant provides funds or an acceptable financial assurance instrument so that the facility can be properly closed at any time and ensure that they have plans and materials in place to do so.		3					Essential	7	2	16	0
Review and monitor facility closure plans and activities, including methane gas control and groundwater monitoring at facilities in closure mode.		3					Essential	7	2	16	0
Provide oversight of new landfill cell construction, including site visits and inspections.		3					Essential	7	2	16	0
Provide oversight of the design and operation of groundwater monitoring systems and methane gas control at permitted landfills	3	3					Essential	7	1	15	1
Meet with facility representatives, consultants, attorneys, governmental entities, and other regulatory representatives to coordinate, resolve issues, initiate and continue remedial activities, and settle violations	3						Essential	5	4	14	0
Provide technical assistance and guidance to the solid waste management industry, as requested, to ensure solid waste is managed in compliance with state law and regulations	3	3	3	3	3	3	Essential	6	2	14	1
Provide policy oversight to regional office solid waste inspections of permitted facilities to ensure completeness, statewide consistency and facility compliance	3						Essential	6	1	13	2

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SAFE DISPOSAL PRACTICES - Permitted Facilities (continued)											
Arrange for and evaluate Quality Assurance/Quality Control split sampling at landfills	3	3				3	Essential	5	2	12	2
Promote waste collection services for all areas of counties (green boxes)			1*				Critically Important	2	4	8	2
Include energy use plans in new landfill permits		2				1*	Critically Important	0	7	7	2
New Technologies											
Investigate and evaluate methane gas migration from landfills; require or take necessary actions to protect public safety and health	3	1*					Essential	6.5	2.5	15.5	0
Research and develop innovative ways to properly close and maintain old landfills that do not have financial assurance instruments that allows for the proper closure of the landfill	3	1*					Critically Important	4	4	12	1
Design future landfills as planned resource recovery facilities		2	2			2	Critically Important	4	3	11	2
Support engineering, enforcement and planning activities by utilizing the Geographical Information System (GIS) to accurately map and document permitted solid waste facilities and unpermitted dumps	3						Critically Important	1	6	8	2
Landfill Mining research		2					Not Necessary	3	1	7	5
Illegal Dumping Enforcement and Prevention											
Investigate and conduct enforcement actions against entities responsible for illegal dumping to discourage and prevent future illegal dumping	1						Essential	9	0	18	0
Ensure that infectious (pathogenic) waste is properly managed and treated or disposed of to prevent illegal dumping and contamination of water and land resources	3						Essential	7	2	16	0
Assisting local governments to develop their own illegal dumping enforcement programs to maintain enforcement activities at the local level for closer regulation of solid waste management laws	3						Essential	5	4	14	0
Conduct video surveillance of illegal dumps in order to identify violators and collect evidence of illegal dumping to be used in criminal prosecutions; working with local law enforcement agencies and county prosecutors to utilize collected evidence to require dump cleanups and collect fines as well as discouraging and preventing future illegal dumping	3						Essential	5	3	13	0
Building and reconstruction permits require environmental aspect before issued	1*					2	Critically Important	2	4	8	2
Technical Assistance											
Respond to questions on how to disposal of railroad ties, CCA lumber, dead animals, and other unusual waste streams.	3	3					Essential	6	3	15	0

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SAFE DISPOSAL PRACTICES - Technical Assistance (continued)											
Provide information to the public, regulated community, legislators and others concerning permitting requirements.	3	3					Essential	6	3	15	0
Design and implement procedures to close abandoned or uncontrolled disposal areas to prevent groundwater contamination, methane migration and other environmental pollution.	3	3					Essential	6	3	15	0
Providing technical assistance and guidance to businesses, governments, and individuals regarding solid waste issues as requested to encourage sound environmental decisions	1	1	1	1	1		Essential	5	4	14	0
Respond to requests for information and technical guidance on infectious waste, post closure land use and special waste issues e.g. airport expansionor disaster debris management	3	3					Essential	5	4	14	0
Engineering input for enforcement activities		3					Essential	6	2	14	1
Review and monitor closure plans and activities	3	3					Essential	5	3	13	1
Landfill remediation tech assistance and actual on-site work	3	3					Critically Important	3	4	10	2
Resource management tied to health and safety	1	1	1				Critically Important	2	4	8	2
SPECIAL SOLID WASTE ISSUES											
Household Hazardous Waste (HHW)											
Provide technical assistance regarding proper disposal of HHW			3		3	3	Critically Important	4	4	12	1
Provide technical assistance regarding alternative products					3		Critically Important	3	4	10	2
HHW - Elemental Mercury (Hg)											
Provide information regarding Hg in the solid waste stream			3		3	3	Critically Important	3	5	11	1
HHW - Electronic Waste											
Provide technical assistance regarding recycling and reuse of electronic waste			3	3	3	3	Critically Important	3	6	12	0
Organics:											
Provide technical assistance regarding alternatives to landfilling organic materials		3	3	3	3	3	Critically Important	2	7	11	0
Items banned from Missouri landfills											
White Goods (WG):											
Assist small businesses that want to collect WG by streamlining regulatory process		2			2	2	Critically Important	2	5	9	2

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SPECIAL SOLID WASTE ISSUES - Items banned from Missouri landfills, White Goods (continued)											
Provide additional information/education materials regarding WG recycling			1*	1*			Critically Important	0	8	8	1
Encourage Solid Waste Management Districts to conduct WG Collections			1*				Critically Important	2	4	8	3
Encourage better end markets for scrap metal			2	2			Critically Important	1	5	7	3
Encourage reuse and repair of WG			1				Critically Important	1	5	7	2
Provide funding for freon extraction certification and equipment			2				Not Necessary	2	2	6	5
Create a fee system to subsidize WG recycling and illegal disposal cleanup	2		2				Not Necessary	1	2	4	6
Lead-Acid Batteries:											
Provide technical assistance regarding lead-acid battery management			3		3		Critically Important	1	5	7	3
Used Oil:											
Provide technical assistance and information regarding used oil			3		3		Critically Important	1	6	8	2
Yard Waste:											
Provide technical assistance regarding yard waste composting regulation		3	3	3	3	3	Critically Important	1	5	7	3
Provide technical assistance regarding yard waste composting			3	3	3		Important	0	6	6	3
Waste Tires											
Waste Tire Processors and Sites, Collection Centers and Waste Tire Haulers											
Require permits for waste tire sites, processors and haulers	3						Essential	7	2	16	0
Enhance established controls for permitting, enforcement and inspections	1						Critically Important	2	4	8	3
Address the waste tires that are not accounted for through the existing infrastructure (5%) by enhancing the tracking system	1*						Important	1	3	5	4
Increase collection center inspections	2					2	Important	0	3	3	4
Ensure that tire collection centers (tire stores, service stations, salvage yards, etc.) are properly managed (preventing vermin/ fire hazards) and are recycling or disposing of tires	3						Essential	5	3	13	1
Illegal Waste Tire Dump, West Nile Virus and Tire Fire Prevention:											
Conduct inspections and enforcement actions against violators the Waste Tire Law	1						Essential	9	0	18	0
Assist local governments with waste tire control efforts and illegal dump cleanups	1*				1		Essential	7	2	16	0

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SPECIAL SOLID WASTE ISSUES - Waste Tires, Illegal Waste Tire Dump, West Nile Virus and Tire Fire Prevention (continued)											
Provide monetary assistance for cleanup of innocent party tire dumps statewide to prevent mosquito borne illnesses and the proliferation of vermin	1						Essential	6	2	14	1
Reimburse non-profit groups for their waste tire cleanups to encourage citizen participation in the maintenance of our environment and to educate the public	1						Critically Important	4	5	13	0
Provide technical assistance to the public, legislators and other officials, tire retailers and recyclers	1			1	1		Critically Important	4	5	13	0
Provide information on tire fire prevention through the Response to Tire Fires Technical Bulletin	1				1		Critically Important	2	5	9	1
Disseminate the Management of Waste Tire Technical Bulletin on how to prevent tires from becoming mosquito breeding grounds and nurseries	1				1		Critically Important	3	3	9	2
Offer incentives to property owners who self-report their tire dumps to sign innovative settlement agreements	1						Critically Important	3	3	9	3
Waste Tire Recycling and Market Development:											
Encourage power plants to use tire derived fuel, lowering their emissions and using more tires	1*					1*	Critically Important	4	4	12	1
Coordinate with other state agencies and industry to introduce more waste tire-derived materials in their projects and the use of waste tires in civil engineering applications	1*			1*			Critically Important	3	6	12	1
Promote landfill projects using waste tire material as a liner protections layer, in leachate and methane gas collection systems and as a drainage layer under final cover	1*	1*					Critically Important	4	3	11	2
Promote the use of waste tire material in highway construction as lightweight fill and drainage	1*			1*			Critically Important	3	5	11	1
Provide grants for schools, parks, other non-profit entities to purchase playground cover made from tires to protect children from injuries from falls	1						Critically Important	2	5	9	2
Promote the use of rubberized asphalt with state and local agencies and paving contractors	1*	1*		1*	2		Critically Important	2	5	9	2
Promote the using rubberized asphalt and the use of crumb rubber in the manufacture of new products	2			1	2		Critically Important	1	6	8	2
Augment market development via Waste Tire Grant Program	1*			2			Critically Important	1	5	7	2